DSA by Shradha Didi & Aman Bhaiya

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How to solve this sheet?

Easy	Ideal Time : 5-10 mins		
Medium	Ideal Time : 15-20 mins	**5 Questions each Day**	
Hard	Ideal Time : 40-60 mins (based on Qs) | 88 Qs		

Complete	Topics	Question (375)	Companies	Remarks
☑	Arrays	Maximum and Minimum Element in an Array	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe	
☐	Arrays	Reverse the Array	Infosys Moonfrog Labs	
☐	Arrays	Maximum-Subarray	Microsoft + Facebook Interview Qs	use Kadane's Algorithm
☐	Arrays	Contains Duplicate	Amazon Interview Qs	
☐	Arrays	Chocolate Distribution Problem	Amazon Interview Qs	
☐	Arrays	Search in Rotated Sorted Array	Microsoft Google Adobe Amazon D-E-Shaw Flipkart Hike Intuit MakeMyTrip Pay	
☐	Arrays	Next Permutation	Uber + Goldman Sachs + Adobe Interview Qs	
☐	Arrays	Best time to Buy and Sell Stock	Amazon D-E-Shaw Directi Flipkart Goldman Sachs Intuit MakeMyTrip Microsoft (	
☐	Arrays	Repeat and Missing Number Array	Amazon Interview Qs	
☐	Arrays	Kth-Largest Element in an Array	Amazon Microsoft Walmart Adobe	
☐	Arrays	Trapping Rain Water	Samsung Interview Qs	
☐	Arrays	Product of Array Except Self	Microsoft + Facebook Interview Qs	
☐	Arrays	Maximum Product Subarray	Amazon D-E-Shaw Microsoft Morgan Stanley OYO Rooms Google	
☐	Arrays	Find Minimum in Rotated Sorted Array	Adobe Amazon Microsoft Morgan Stanley Samsung Snapdeal Times Internet	
☐	Arrays	Find Pair with Sum in Sorted & Rotated Array	Microsoft + Google + Apple Interview Qs	
☐	Arrays	3Sum	Adobe Amazon Microsoft Morgan Stanley Samsung Snapdeal Times Internet	
☐	Arrays	Container With Most Water	Flipkart + Dunzo Interview Qs	
☐	Arrays	Given Sum Pair	Infosys + Amazon + Flipkart Interview Qs	
☐	Arrays	Kth - Smallest Element	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe	
☐	Arrays	Merge Overlapping Intervals	Google Interview Qs	
☐	Arrays	Find Minimum Number of Merge Operations to Make an Array Palindrome	Amazon	
☐	Arrays	Given an Array of Numbers Arrange the Numbers to Form the Biggest Number	Barclays Interview Qs	
☐	Arrays	Space Optimization Using Bit Manipulations	Amazon	
☐	Arrays	Subarray Sum Divisible K	Snapdeal Microsoft	
☐	Arrays	Print all Possible Combinations of r Elements in a Given Array of Size n	Amazon	
☐	Arrays	Mo's Algorithm	Microsoft	
☐	Strings	Valid Palindrome	Amazon Cisco D-E-Shaw Facebook FactSet Morgan Stanley Paytm Zoho	
☐	Strings	Valid Anagram	Nagarro Media.net Directi Google Adobe Flipkart	
☐	Strings	Valid parentheses	Google Interview Qs	use Stacks (if possible)
☐	Strings	Remove Consecutive Characters	Samsung + Adobe	
☐	Strings	Longest Common Prefix	Adobe + Grofers + Dunzo Interview Qs	
☐	Strings	Convert a Sentence into its Equivalent Mobile Numeric Keypad Sequence	Adobe	
☐	Strings	Print all the Duplicates in the Input String	Ola + Amdocs IQ	
☐	Strings	Longest Substring without Repeating Characters	Morgan Stanley + Amazon IQ	
☐	Strings	Longest Repeating Character Replacement	Amazon Google	
☐	Strings	Group Anagrams	Samsung + Adobe + Amazon Interview Qs	
☐	Strings	Longest Palindromic Substring	Microsoft + Google + Samsung + Visa IQ	
☐	Strings	Palindromic Substrings	Microsoft IQ	
☐	Strings	Next Permutation	Adobe + Goldman Sachs + Uber	
☐	Strings	Count Palindromic Subsequences	Myntra Interview Qs	
☐	Strings	Smallest Window in a String Containing all the Characters of Another String	Microsoft + Amazon IQ	
☐	Strings	Wildcard String Matching	Microsoft + Amazon + Ola IQ	
☐	Strings	Longest Prefix Suffix	Flipkart + Swiggy IQ	
☐	Strings	Rabin-Karp Algorithm for Pattern Searching	Microsoft	
☐	Strings	Transform One String to Another using Minimum Number of Given Operation	Directi	
☐	Strings	Minimum Window Substring	Amazon Google MakeMyTrip Streamoid Technologies Microsoft Media.net Atlas	
☐	Strings	Boyer Moore Algorithm for Pattern Searching	Amdocs	
☐	Strings	Word Wrap	Microsoft	use Dynaming Programming
☐	2D Arrays	Zigzag (or diagonal) Traversal of Matrix	Amazon	
☐	2D Arrays	Set Matrix Zeroes	Amazon Microsoft	
☐	2D Arrays	Spiral Matrix	Flipkart + Apple + Societe Generale IQ	
☐	2D Arrays	Rotate Image	Microsoft Paytm Samsung Adobe	
☐	2D Arrays	Word Search	Google + Ola + Goldman Sachs IQ	
☐	2D Arrays	Find the Number of Islands | Set 1 (Using DFS)	Microsoft + Uber + Apple + Amazon IQ	Read about DFS
☐	2D Arrays	Given a Matrix of 'O' and 'X', Replace 'O' with 'X' if Surrounded by 'X'	Google	
☐	2D Arrays	Find a Common Element in all Rows of a Given Row-Wise Sorted Matrix	MAQ Software Microsoft VMWare	
☐	2D Arrays	Create a Matrix with Alternating Rectangles of O and X	MAQ VMWare	
☐	2D Arrays	Maximum Size Rectangle of all 1s	Amazon Microsoft	
☐	Searching & Sorting	Permute Two Arrays such that Sum of Every Pair is Greater or Equal to K	Samsung	
☐	Searching & Sorting	counting sort	Samsung+ Morgan Stanley+ Snapdeal + EPAM Systems	
☐	Searching & Sorting	find common elements three sorted arrays	MAQ Software Microsoft VMWare	
☐	Searching & Sorting	Searching in an array where adjacent differ by at most k	TCS Amazon	
☐	Searching & Sorting	ceiling in a sorted array	TCS	
☐	Searching & Sorting	Piar with given difference	Amazon Visa	
☐	Searching & Sorting	majority element	Amazon+ Google	
☐	Searching & Sorting	count triplets with sum smaller that a given value	Amazon SAP Labs	
☐	Searching & Sorting	Maximum Sum Subsequence with no adjacent elements	Amazon FactSet Oxigen Wallet OYO Rooms Paytm Walmart Yahoo Adobe Flipka	
☐	Searching & Sorting	Merge Sorted Arrays using O(1) Space	Amdocs Brocade Goldman Sachs Juniper Networks Linkedin Microsoft Quikr Sn	
☐	Searching & Sorting	Inversion of Array	Adobe Amazon BankBazaar Flipkart Microsoft Myntra MakeMyTrip	
☐	Searching & Sorting	Find Duplicates in O(n) Time and O(1) Extra Space	Amazon D-E-Shaw Flipkart Paytm Qualcomm Zoho	
☐	Searching & Sorting	Radix Sort	Amazon+ Microsoft	
☐	Searching & Sorting	Product of Array except itself	Accolite Amazon D-E-Shaw Intuit Morgan Stanley Opera Microsoft Flipkart	
☐	Searching & Sorting	Make all Array Elements Equal	Amazon	
☐	Searching & Sorting	Check if Reversing a Sub Array Make the Array Sorted	Amazon	
☐	Searching & Sorting	Find Four Elements that Sum to a Given Value	Adobe Amazon Google Microsoft OYO Rooms	
☐	Searching & Sorting	Median of Two Sorted Array with Different Size	Amazon Samsung Microsoft Google	
☐	Searching & Sorting	Median of Stream of Integers Running Integers	Amazon + Google	
☐	Searching & Sorting	Print Subarrays with 0 Sum	Paytm Adobe	
☐	Searching & Sorting	Aggressive Cows	Adobe	
☐	Searching & Sorting	Allocate Minimum number of Pages	Google Infosys Codenation Amazon Microsoft	
☐	Searching & Sorting	Minimum Swaps to Sort	Amazon + Google	
☐	Backtracking	Backtracking Set 2 Rat in a Maze	Microsoft Amazon	
☐	Backtracking	Combinational Sum	Adobe Amazon Microsoft	
☐	Backtracking	Crossword-Puzzle	Microsoft	
☐	Backtracking	Longest Possible Route in a Matrix with Hurdles	Microsoft	
☐	Backtracking	Printing all solutions in N-Queen Problem	Accolite Amazon Amdocs D-E-Shaw MAQ Software Twitter Visa Microsoft	
☐	Backtracking	Solve the Sudoku	Amazon Directi Flipkart MakeMyTrip MAQ Software Microsoft Ola Cabs Oracle F	
☐	Backtracking	Partition Equal Subset Sum	Amazon + Adobe + Accolite + Traveloka	
☐	Backtracking	M Coloring Problem	Amazon	
☐	Backtracking	Knight Tour	IBM	
☐	Backtracking	Soduko	Amazon + Adobe + Accolite + Traveloka	
☐	Backtracking	Remove Invalid Parentheses	Uber	
☐	Backtracking	Word Break Problem using Backtracking		
☑	Backtracking	Print all Palindromic Partitions of a String	Facebook Amazon Microsoft	
☐	Backtracking	Find Shortest Safe Route in a Path with Landmines	Facebook Amazon Microsoft	

		Topic	Problem	Companies	
☐		Backtracking	Partition of Set into K Subsets with Equal Sum	Amazon	
☐		Backtracking	Backtracking set-7 hamiltonian cycle	Amazon	
☐		Backtracking	tug-of-war	Google	
☐		Backtracking	Maximum Possible Number by doing at most K swaps	Amazon + Adobe + Accolite + Traveloka	
☐		Backtracking	Backtracking set-8 solving cryptarithmetic puzzles	Goldman Sachs	
☐		Backtracking	Find paths from corner cell to middle cell in maze	Meta	
☐		Backtracking	Arithmetic Expressions	Flipkart	
☐		Linked List	Reverse Linked List	Sprinklr	
☐		Linked List	Linked List Cycle	Accolite Amazon D-E-Shaw Hike Lybrate Mahindra Comviva MakeMyTrip MAQ S	
☐		Linked List	Merge Two Sorted Lists	Accolite Amazon Belzabar Brocade FactSet Flipkart MakeMyTrip Microsoft OATS	
☐		Linked List	Delete without Head node	Amazon Goldman Sachs Kritikal Solutions Microsoft Samsung Visa	
☐		Linked List	Remove duplicates from an unsorted linked list	Amazon Intuit	
☐		Linked List	Sort a linked list of 0s-1s-or-2s	Microsoft Amazon MakeMyTrip	
☐		Linked List	Multiply two numbers represented linked lists	Amazon	
☐		Linked List	Remove nth node from end of list	Accolite Adobe Amazon Citicorp Epic Systems FactSet Hike MAQ Software Mon	
☐		Linked List	Reorder List	Amazon Microsoft OYO Rooms Intuit	
☐		Linked List	Detect and remove loop in a linked list	Accolite Amazon D-E-Shaw Hike Lybrate Mahindra Comviva MakeMyTrip MAQ S	
☐		Linked List	Write a Function to get the Intersection Point of two Linked Lists	Amazon	
☐		Linked List	Flatten a linked list with next and child pointers	Google	
☐		Linked List	Linked list in zig-zag fashion	Microsoft	
☐		Linked List	Reverse a doubly linked list	Walmart	
☐		Linked List	Delete nodes which have a greater value on right side	Amazon	
☐		Linked List	Segregate even and odd Elements in a Linked List	Walmart	
☐		Linked List	Point to next higher value node in a linked list with an Arbitrary Pointer	GeekyAnts	
☐		Linked List	Rearrange a given linked list in place	Ola Uber	
☐		Linked List	Sort Biotonic Doubly Linked Lists	Morgan Stanley	
☐		Linked List	Merge K Sorted Lists	Microsoft+ Ola+ eBay	
☐		Linked List	Merge sort for linked list	Accolite Adobe Amazon MAQ Software Microsoft Paytm Veritas	Important
☐		Linked List	Quicksort on singly-linked list	Paytm	Important
☐		Linked List	Sum of two linked lists	Accolite Amazon Flipkart MakeMyTrip Microsoft Morgan Stanley Qualcomm Sna	
☐		Linked List	Flattening a linked list	24*7 Innovation Labs Amazon Drishti-Soft Flipkart Goldman Sachs Microsoft Pa	
☐		Linked List	Clone a linked list with next and random Pointer	Triology	
☐		Linked List	Subtract two numbers represented as linked lists	Amazon Goldman Sachs	
☐		Stacks & Queues	Implement two stacks in an Array	24*7 Innovation Labs Microsoft Samsung Snapdeal	
☐		Stacks & Queues	Evaluation of Postfix Expression	Amazon + Google + Facebook	
☐		Stacks & Queues	Implement Stack using Queues	Facebook	
☐		Stacks & Queues	Queue Reversal	Amazon + Morgain Stanley	
☐		Stacks & Queues	Implement Stack Queue using Deque	Microsoft +Atlassian	
☐		Stacks & Queues	Reverse first k elements of queue	Microsoft + Amdocs	
☐		Stacks & Queues	Design Stack with Middle Operation	MaQ Software	
☐		Stacks & Queues	Infix to Postfix	Amazon + Samsung + Paytm + Vmware inc	
☐		Stacks & Queues	Design and Implement Special stack	Amazon Google Microsoft Visa Goldman Sachs	
☐		Stacks & Queues	Longest Valid String	Google Microsoft	
☐		Stacks & Queues	Find if an expression has duplicate parenthesis or not	Flipkart Oracle OYO Rooms Snapdeal Walmart Yatra.com Microsoft Google	
☐		Stacks & Queues	Stack permutations check if an array is stack permutation of other	Visa	
☐		Stacks & Queues	Count natural numbers whose permutation greater number	Amazon	
☐		Stacks & Queues	Sort a stack using Recursion	Amazon Goldman Sachs IBM Intuit Kuliza Yahoo Microsoft	
☐		Stacks & Queues	Queue based approach for first non repeating character in a stream	Microsoft Flipkart	
☐		Stacks & Queues	The Celebrity Problem	Google + Visa + Apple	
☐		Stacks & Queues	Next larger Element	Visa	
☐		Stacks & Queues	Distance of nearest cell	Flipkar + Facebook	
☐		Stacks & Queues	Rotten-oranges	Facebook	
☐		Stacks & Queues	Next smaller element	Codenation	
☐		Stacks & Queues	Circular-tour	Codenation Flipkart	
☐		Stacks & Queues	Efficiently implement k-stacks single array	Flipkart	
☐		Stacks & Queues	The celebrity problem	Google + Visa + Apple	
☐		Stacks & Queues	Iterative tower of hanoi	Microsoft Flipkart	
☐		Stacks & Queues	Find the maximum of minimums for every window size in a given array	Amazon Microsoft Flipkart	
☐		Stacks & Queues	lru cache implementation	Microsoft + Uber + Alibaba	
☐		Stacks & Queues	Find a tour that visits all stations	Uber	
☐		Greedy	Activity selection problem greedy algo	Facebook Morgan Stanley Flipkart	
☐		Greedy	Greedy algorithm to find minimum number of coins	Accolite Amazon Morgan Stanley Oracle Paytm Samsung Snapdeal Synopsys Vi	
☐		Greedy	Minimum sum two numbers formed digits array-2	Google	
☐		Greedy	Minimum sum absolute difference pairs two arrays	Amazon	
☐		Greedy	Find maximum height pyramid from the given array of objects	Flipkart Amazon	
☐		Greedy	Minimum cost for acquiring all coins with k extra coins allowed with every coin		
☐		Greedy	Find maximum equal sum of every three stacks	Microsoft Amazon Flipkart	
☐		Greedy	Job sequencing problem	Microsoft + Acolite	
☐		Greedy	Greedy algorithm egyptian fraction		
☐		Greedy	Fractional knapsack problem	Microsoft	
☐		Greedy	Maximum length chain of pairs	Amazon Microsoft	
☐		Greedy	Find smallest number with given number of digits and digit sum	MAQ Software OYO Rooms	
☐		Greedy	Maximize sum of consecutive differences circular-array	Maccafe	
☐		Greedy	paper-cut minimum number squares	Google	
☐		Greedy	Lexicographically smallest array-k consecutive swaps	Amazon	
☐		Greedy	Problems-CHOCOLA	Flipkart	
☐		Greedy	Find minimum time to finish all jobs with given constraints		
☐		Greedy	Job sequencing using disjoint set union	Samsung	
☐		Greedy	Rearrange characters string such that no two adjacent are same	Amazon Microsoft	
☐		Greedy	Minimum edges to reverse to make path from a source to a destination		
☐		Greedy	Minimize Cash Flow among a given set of friends who have borrowed money from each other		
☐		Greedy	Minimum Cost to cut a board into squares	Maccafe	
☐		Binary Trees	Maximum Depth of Binary Tree	Amazon Cadence India CouponDunia D-E-Shaw FactSet FreeCharge MakeMyTri	
☐		Binary Trees	Reverse Level Order Traversal	Amazon + Microsoft + flipkart + Adobe	
☐		Binary Trees	Subtree of Another Tree	Amazon + Microsoft + Facebook	
☐		Binary Trees	Invert Binary Tree	Amazon Hike	
☐		Binary Trees	Binary Tree Level Order Traversal	Accolite Adobe Amazon Cisco D-E-Shaw Flipkart	
☐		Binary Trees	Left View of Binary Tree	Microsoft + Adobe + Cisco Networking Academy	
☐		Binary Trees	Right View of Binary Tree	Amdocs	
☐		Binary Trees	ZigZag Tree Traversal	Amazon Cisco FactSet Hike Snapdeal Walmart Microsoft Flipkart	
☐		Binary Trees	Create a mirror tree from the given binary tree	Accolite Adobe Amazon Belzabar EBay Goldman Sachs Microsoft Morgan Stanle	
☐		Binary Trees	Leaf at same level	Amazon	
☐		Binary Trees	Check for Balanced Tree	Amazon Walmart Microsoft	
☐		Binary Trees	Transform to Sum Tree	Amazon FactSet Microsoft Samsung Walmart	
☐		Binary Trees	Check if Tree is Isomorphic	Amazon Microsoft	
☐		Binary Trees	Same Tree	Amazon Microsoft Flipkart	
☐		Binary Trees	Construct Binary Tree from Preorder and Inorder Traversal	Accolite Amazon Microsoft	
☐		Binary Trees	Height of Binary Tree	Amazon Cadence India CouponDunia D-E-Shaw FactSet FreeCharge MakeMyTri	
☐		Binary Trees	Diameter of a Binary Tree	Amazon Microsoft OYO Rooms	
☐		Binary Trees	Top View of Binary Tree	Microsoft + Adobe + Expedia Group	
☐		Binary Trees	Bottom View of Binary Tree	DE Shaw India	
☐		Binary Trees	Diagonal Traversal of Binary Tree	Amazon Microsoft	
☐		Binary Trees	Boundary Traversal of binary tree	Accolite Amazon FactSet Hike Kritikal Solutions	
☐		Binary Trees	Construct Binary Tree from String with Brackets	Microsoft Morgan Stanley OYO Rooms Payu Samsung Snapdeal Flipkart	
☐		Binary Trees	Minimum swap required to convert binary tree to binary search tree	Adobe Amazon	

	Topic	Problem	Companies	
☐	Binary Trees	Duplicate subtree in Binary Tree	Google	
☐	Binary Trees	Check if a given graph is tree or not	Microsoft Amazon	
☐	Binary Trees	Lowest Common Ancestor in a Binary Tree	Accolite Amazon American Express Cisco Expedia Flipkart MakeMyTrip Microso	
☐	Binary Trees	Min distance between two given nodes of a Binary Tree	Amazon Linkedin MakeMyTrip Ola Cabs Qualcomm Samsung	
☐	Binary Trees	Duplicate Subtrees	Ola	
☐	Binary Trees	Kth ancestor of a node in binary tree	Josh Technology Group	
☐	Binary Trees	Binary Tree Maximum Path Sum	Samsung + Facebook	
☐	Binary Trees	Serialize and Deserialize Binary Tree	Flipkart InMobi Linkedin MAQ Software Microsoft Paytm Quikr Yahoo	
☐	Binary Trees	Binary Tree to DLL	Accolite Amazon Goldman Sachs Microsoft Morgan Stanley Salesforce Snapdea	
☐	Binary Trees	Print all k-sum paths in a binary tree	Accolite Amazon Goldman Sachs	
☐	Binary Search Trees	Lowest Common Ancestor of a Binary Search Tree	Accolite Amazon Flipkart MAQ Software Microsoft Samsung Synopsys	
☐	Binary Search Trees	Binary Search Tree	Set 1 (Search and Insertion)	Accolite Amazon Microsoft Paytm Samsung	
☐	Binary Search Trees	Minimum element in BST	Microsoft	
☐	Binary Search Trees	Predecessor and Successor	Google + Adobe + Goldman Sachs + Direct	
☐	Binary Search Trees	Check whether BST contains Dead End	Walmart	
☐	Binary Search Trees	Binary Tree to BST	HSBC	
☐	Binary Search Trees	Kth largest element in BST	Accolite Amazon Samsung SAP Labs Microsoft	
☐	Binary Search Trees	Validate Binary Search Tree	OYO Rooms Qualcomm Samsung Snapdeal VMWare Walmart Wooker Amazon	
☐	Binary Search Trees	Kth Smallest Element in a BST	Accolite Amazon Google	
☐	Binary Search Trees	Delete Node in a BST	Adobe Barclays	
☐	Binary Search Trees	Flatten BST to sorted list	Microsoft	
☐	Binary Search Trees	Preorder to Postorder	Amazon Linkedin Flipkart	
☐	Binary Search Trees	Count BST nodes that lie in a given range	D-E-Shaw Google	
☐	Binary Search Trees	Populate Inorder Successor for all Nodes	Sap labs	
☐	Binary Search Trees	Convert Normal BST to Balanced BST	Paytm	
☐	Binary Search Trees	Merge two BSTs	DE Shaw India	
☐	Binary Search Trees	Given n appointments, find all conflicting appointments	Samsung	
☐	Binary Search Trees	Replace every element	Samsung	
☐	Binary Search Trees	Construct BST from given preorder traversal	Adobe Morgan Stanley Microsoft	
☐	Binary Search Trees	Find median of BST in O(n) time and O(1) space	Amazon	
☐	Binary Search Trees	Largest BST in a Binary Tree	Amazon D-E-Shaw Samsung Microsoft Flipkart	Important
☐	Heaps & Hashing	Choose k array elements such that difference of maximum and minimum is minimized	Adobe	
☐	Heaps & Hashing	Heap Sort	Amazon Microsoft	
☐	Heaps & Hashing	Top K Frequent Elements	Amazon Microsoft Walmart Adobe	
☐	Heaps & Hashing	k largest elements in an array	Amazon + Microsoft + Flipkart + Adobe	
☐	Heaps & Hashing	Next Greater Element	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe	
☐	Heaps & Hashing	K'th Smallest/Largest Element in Unsorted Array	Accolite Amazon	
☐	Heaps & Hashing	Find the maximum repeating number in O(n) time and O(1) extra space	ABCO Accolite Amazon Cisco Hike Microsoft Snapdeal VMWare Google Adobe	
☐	Heaps & Hashing	K-th smallest element after removing some integers from natural numbers	Amazon OYO Rooms	
☐	Heaps & Hashing	Find k closest elements to a given value	Amazon Cisco Hike OYO Rooms Walmart Microsoft Flipkart	
☐	Heaps & Hashing	K'th largest element in a stream	Amazoon + Oyo + Goldman Sachs	
☐	Heaps & Hashing	Connect Ropes	Amaxon	
☐	Heaps & Hashing	Cuckoo Hashing	Microsoft + Ola + eBay	
☐	Heaps & Hashing	Itinerary from a List of Tickets	Amazon MakeMyTrip Microsoft	
☐	Heaps & Hashing	Largest Subarray with 0 Sum	Accolite Amazon Microsoft	
☐	Heaps & Hashing	Count distinct elements in every window of size k	Oracle	
☐	Heaps & Hashing	Group Shifted Strings	Microsoft + Ola + eBay	
☐	Heaps & Hashing	Merge K Sorted lists	Adobe Amazon Apple Belzabar D-E-Shaw Facebook Flipkart Google Intuit Micro	
☐	Heaps & Hashing	Find Median from Data Stream	Amazon Directi Flipkart Microsoft Google	
☐	Heaps & Hashing	Sliding Window Maximum	Accolite Amazon Samsung Snapdeal	
☐	Heaps & Hashing	Find the smallest positive number	Amazon Morgan Stanley Ola Cabs SAP Labs	
☐	Heaps & Hashing	Find Surpasser Count of each element in array	Amazon Ola Cabs Samsung Synopsys Walmart Microsoft	
☐	Heaps & Hashing	Tournament Tree and Binary Heap	Amazon Cisco D-E-Shaw Facebook FactSet Morgan Stanley Paytm Zoho	
☐	Heaps & Hashing	Check for palindrome	Amazon Intuit Microsoft	
☐	Heaps & Hashing	Length of the largest subarray with contiguous elements	Amazon Morgan Stanley Ola Cabs SAP Labs	
☐	Heaps & Hashing	Palindrome Substring Queries	Microsoft + Ola + eBay	
☐	Heaps & Hashing	Subarray distinct elements	MAQ Software	
☐	Heaps & Hashing	Find the recurring function	Amazon	
☐	Heaps & Hashing	K maximum sum combinations from two arrays	Amazon	
☐	Graphs	BFS	Samsung + Delhivery + SAP Labs	
☐	Graphs	DFS	Samsung + Intuit + Goldman Sachs	
☐	Graphs	Flood Fill Algorithm	Google + Adobe + Apple	
☐	Graphs	Number of Triangles	IBM	
☐	Graphs	Detect cycle in a graph	Lenksart	
☐	Graphs	Detect cycle in an undirected graph	Samsung	
☐	Graphs	Rat in a Maze Problem	Sharechat + Directi	
☐	Graphs	Steps by Knight	Samsung	
☐	Graphs	Clone graph	Google + MAQ Software + Apple + Facebook	
☐	Graphs	Number of Operations to Make Network Connected	Samsung	
☐	Graphs	Dijkstra's shortest path algorithm	Amazon	
☐	Graphs	Topological Sort	Amazon + Google + Flipkart + Oyo + Flipkart + Samsung	
☐	Graphs	Oliver and the Game	Sharechat + Directi	
☐	Graphs	Minimum time taken by each job to be completed given by a Directed Acyclic Graph	Amazon	
☐	Graphs	Find whether it is possible to finish all tasks or not from given dependencies	Directi + Sharechat	
☐	Graphs	Find the number of islands	Razorpay	
☐	Graphs	Prim's Algo	Visa	
☐	Graphs	Negative Weighted Cycle	Amazon	
☐	Graphs	Floyd Warshall	Google + Uber	
☐	Graphs	Graph Coloring	Morgan Stanley	
☐	Graphs	Snakes and Ladders	Goldman Sachs +Makemytrip	
☐	Graphs	Kosaraju's Theorem	Paytm	
☐	Graphs	Journey to moon	Lenksart + Payload	
☐	Graphs	Vertex Cover	Intuit	
☐	Graphs	M Coloring Problem	Uber	
☐	Graphs	Cheapest Flights Within K Stops	Uber + Paypal	
☐	Graphs	Find if there is a path of more than k length from a source	Cisco + Intuit	
☐	Graphs	Bellman Ford	Sharechat + Directi	
☐	Graphs	Bipartitie Graph	Microsoft Flipkart	
☐	Graphs	Word-Ladder	Microsoft	
☐	Graphs	Allen Dictionary	Samsung	
☐	Graphs	Kruskals MST	Amazon Cisco Samsung	Important
☐	Graphs	Total number spanning trees graph	Amazon Cisco Samsung Microsoft Flipkart	
☐	Graphs	Travelling Salesman	Google + Microsoft + Opera	Important
☐	Graphs	Find longest path directed acyclic graph	Google	
☐	Graphs	Two Clique Problem	Microsoft	
☐	Graphs	Minimise the cash flow	Intuit + Uber	
☐	Graphs	Chinese postman	Intuit	
☐	Graphs	Water Jug	Intuit + Uber	
☐	Graphs	Water Jug 2	MakeMyTrip MAQ Software	
☐	Tries	Construct a trie from scratch	Accolite Amazon D-E-Shaw FactSet Microsoft	
☐	Tries	Print unique rows in a given boolean matrix	Amazon Zoho	
☐	Tries	Word Break Problem	(Trie solution)	Amazon Google Hike IBM MAQ Software Microsoft Walmart Zoho	
☐	Tries	Given a sequence of words, print all anagrams together	Amazon D-E-Shaw Goldman Sachs Morgan Stanley Snapdeal Microsoft	
☐	Tries	Find shortest unique prefix for every word in a given list	Microsoft Google	
☐	Tries	Implement a Phone Directory	Amazon + Microsoft + Snapdeal	

	Category	Problem	Companies
☐	DP	Knapsack with Duplicate Items	Amazon
☐	DP	BBT counter	Microsoft
☐	DP	Reach a given score	Samsung
☐	DP	Maximum difference of zeros and ones in binary string	Ola
☐	DP	Climbing Stairs	Intuit
☐	DP	Permutation Coefficient	Amazon
☐	DP	Longest Repeating Subsequence	Google + Amazon
☐	DP	Pairs with specific difference	Ola
☐	DP	Longest subsequence-1	Amazon
☐	DP	Coin Change	Microsoft+ Samsung + Barclays + Apple + Adobe
☐	DP	LIS	Amazon + Google + Facebook + Fidelity International
☐	DP	Longest Common Subsequence	Siemens + Amazon + Google
☐	DP	Word Break	Amazon + Google + Microsoft + Walmart + Apple + IBM
☐	DP	Combination Sum IV	Adobe Amazon Microsoft
☐	DP	House Robber	Apple + Uber
☐	DP	Houe Robber 2	Arrays Dynamic Programming
☐	DP	Decode Ways	Adobe + Uber
☐	DP	Unique Paths	Google + Microsoft
☐	DP	Jumps Game	Facebook Amazon Microsoft Google
☐	DP	Knapsack Problem	Amazon Directi Flipkart GreyOrange Microsoft Mobicip Morgan Stanley Oracle I
☐	DP	nCr	Google
☐	DP	Catalan Number	Amazon + Google
☐	DP	Edit Distance	Google + Goldman Sachs + Citrix
☐	DP	Subset Sum	Amazon + Google
☐	DP	Gold mine	Samsung
☐	DP	Assembly Line Scheduling	Goldman Sachs
☐	DP	Maximize The Cut Segments	Amazon OYO Rooms Microsoft
☐	DP	Maximum sum increasing subsequence	Amazon Morgan Stanley Microsoft
☐	DP	Count all subsequences having product less than K	Goldman Sachs
☐	DP	Maximum sum increasing subsequence	Amazon Morgan Stanley Microsoft
☐	DP	Egg dropping puzzle	Amazon D-E-Shaw Goldman Sachs Google Hike MakeMyTrip MAQ Software My
☐	DP	Max length chain	Amazon Microsoft
☐	DP	Largest Square in Matrix	Amazon Samsung
☐	DP	Maximum Path Sum	Amazon + Microsoft + Oyo + Directi
☐	DP	Minimum Number of Jumps	Adobe Amazon Housing.com Moonfrog Labs Walmart Microsoft Google Flipkart
☐	DP	Minimum removals from array to make max – min <= K	Amazon
☐	DP	Longest Common Substring	Webarch Club
☐	DP	Partition Equal Subset Sum	Amazon + Accolite + Traveloca + Adobe
☐	DP	Longest Palindromic Subsequence	Amazon Google
☐	DP	Count Palindromic Subsequences	Myntra
☐	DP	Longest Palindromic Substring	Amazon + Microsoft + Samsung + Visa
☐	DP	Longest Alternating Sequence	Ola
☐	DP	Weighted Job Scheduling	Intuit
☐	DP	Coin Game	Salesforce
☐	DP	Coin Game Winner	Ola
☐	DP	Optimal Strategy for a game	Google + IBM
☐	DP	Word Wrap	Microsoft
☐	DP	Mobile numeric keypad	Amazon Microsoft
☐	DP	Maximum Length of Pair Chain	Amazon Microsoft
☐	DP	Matrix Chain Multiplication	Walmart + Flipkart
☐	DP	Maximum profit by buying and selling a share at most twice	Accolite Amazon Microsoft
☐	DP	Optimal BST	Google
☐	DP	Largest Submatrix with sum 0	Amazon MakeMyTrip Microsoft
☐	DP	Largest area rectangular sub-matrix with equal number of 1's and 0's	Amazon Directi Intuit MakeMyTrip Microsoft Samsung Google Flipkart
☐	Bit Manipulation	Count set bits in an integer	Adobe Apple
☐	Bit Manipulation	Find the two non-repeating elements in an array of repeating elements	Accolite Amazon FactSet Google MakeMyTrip Microsoft Qualcomm Samsung
☐	Bit Manipulation	Program to find whether a no is power of two	Adobe
☐	Bit Manipulation	Find position of the only set bit	Microsoft
☐	Bit Manipulation	Count number of bits to be flipped to convert A to B	Maq Software
☐	Bit Manipulation	Count total set bits in all numbers from 1 to n	Microsoft
☐	Bit Manipulation	Copy set bits in a range	Facebook
☐	Bit Manipulation	Calculate square of a number without using *, / and pow()	Amazon
☐	Bit Manipulation	Divide two integers without using multiplication, division and mod operator	Microsoft
☐	Bit Manipulation	Power Set	Google + Adobe + Paytm
☐	Segment Trees	Range Sum Query - Immutable	
☐	Segment Trees	Range Minimum Query	Google Interview Qs
☐	Segment Trees	Range Sum Query - Mutable	Alibaba
☐	Segment Trees	Create Sorted Array through Instructions	Samsung + Accolite
☐	Segment Trees	Count of Range Sum	Walmart
☐	Segment Trees	Count of Smaller Numbers After Self	Codenation Google